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| EXAMINER |
|---|
| LU, KUEN S |

| ART UNIT | PAPER NUMBER |
|---|---|
| 2167 | |

DATE MAILED: 06/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on <u>25 April 2005</u>.

2a)☐ This action is **FINAL**.        2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) <u>12-19,21-28 and 38-49</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>12-19,21-28 and 38-49</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All    b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

## DEAILED ACTION

### *Response to Amendments*

**1.** The Action is responsive to the Applicant's Amendments, filed on April 25, 2005.

**2.** In responding to Applicant's Amendments made to the claims wherein claims 38-49 were amended, including all independent claims, claims 1-11, 20 and 29-37 were cancelled, and claims 12, 14-16, 18-19, 21, 24-25 and 27-28 were amended, the Examiner has created this Office Action for non-Final Rejection (hereafter "the Action") as shown next.

**3.** As for the Applicant's Remarks on claim rejections, filed on April 25, 2005, has been fully considered by the Examiner, please see discussion in the section *Response to Arguments*, following the Action.

### *Claim Rejections - 35 USC § 102*

**4.** The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

**5.** Claims 38, 43 and 46-49 are rejected under 35 U.S.C. 102(b) as anticipated by Uemura et al. (U.S. Patent 6,609,085, hereafter "Uemura").

As per claims 38, 43 and 46, Uemura teaches the following:

"accessing time series data of a process" (See Fig. 5 and col. 14, lines 3-25 wherein

Uemura's system for accessing, monitoring and collecting time series data of an

industrial plan at a remote site is equivalent to Applicant's accessing time series data of

a process);

"a processor and an activity framing program that responds to input data entered by a

user to define a data structure" (See Fig. 29 and col. 27, lines 52-57 wherein Uemura's

tag information on required trend data and date information on the term the time series

data needed is inputted is equivalent to Applicant's a processor and an activity framing

program that responds to input data entered by a user to define a data structure),

"wherein said activity framing program responds to said input data to define said data

structure with a plurality of activities of said process, at least one attribute of a first one

of said activities, a definition of said attribute and a tag for a device that produces at

least a portion of said time series data that occurs during said first activity" (See Fig. 26

and col. 25, line 61 – col. 26. 7 wherein Uemura's time series data of respective groups

are sequentially recorded along with information for identifying the groups and data

information for indicating a time acquiring the data is equivalent to Applicant's wherein

said activity framing program responds to said input data to define said data structure

with a plurality of activities of said process, at least one attribute of a first one of said

activities, a definition of said attribute and a tag for a device that produces at least a

portion of said time series data that occurs during said first activity), and

"wherein said framing program further responds to a request that identifies said first

activity and said tag by using said data structure to access said time series data to

retrieve said portion of said time series data" (See Fig. 26 and col. 25, line 61 – col. 26.

7 wherein Uemura's tag information for identifying the groups and data information for

indicating a time acquiring the data is utilized to identify and retrieve the time series data

of an industrial activity, and the times series data is framed as the example X1, X2, ...

Xn, A-1 is equivalent to Applicant's wherein said framing program further responds to a

request that identifies said first activity and said tag by using said data structure to

access said time series data to retrieve said portion of said time series data).

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As per claims 47-49, Uemura teaches the following:

"accessing time series data of a process that is stored in a memory" (See Figs. 5, 26, 29

col. 14, lines 3-25,  col. 25, line 61 – col. 26. 7 and col. 28, lines 24-45 wherein

Uemura's system for accessing, monitoring and collecting time series data of an

industrial plan at a remote site, and framing and recording the time series data to

magnetic memory for being available for user to retrieve is equivalent to Applicant's

accessing time series data of a process that is stored in a memory);

"(a) generating an access request that is based on a data structure that comprises a

plurality of activities, at least a first one of said activities framing a portion of said time

series data produced by a device, wherein said access request identifies said first

activity and said device" (See Figs. 5, 26, 29  col. 14, lines 3-25,  col. 25, line 61 – col.

26. 7 and col. 28, lines 24-45 wherein Uemura's trend data in time series format

representing activity of an industrial process is being read out based on tag information

of data groups and date information indicating the time the data being acquired is

equivalent to Applicant's generating an access request that is based on a data structure

that comprises a plurality of activities, at least a first one of said activities framing a

portion of said time series data produced by a device, wherein said access request

identifies said first activity and said device); and

"(b) in response to said access request, using said data structure to access said

memory to retrieve said portion of said time series data" (See Figs. 5, 26, 29 col. 14,

lines 3-25, col. 25, line 61 – col. 26. 7 and col. 28, lines 24-45 wherein Uemura's trend

data in time series format representing activity of an industrial process is being read out,

receive and displayed, based on tag information of data groups and date information

indicating the time the data being acquired is equivalent to Applicant's in response to

said access request, using said data structure to access said memory to retrieve said

portion of said time series data).


As per claims 12 and 21, Uemura further teaches "data structure for at least said first

activity includes an activity structure that comprises an identity and a plurality of activity

attributes" (See Fig. 37C and col. 30, lines 13-31 wherein Uemura's time series data for

industrial activity includes attributes item, tag, date number, initialDate to identify and

delta time to identify the activity values is equivalent to Applicant's data structure for at

least said first activity includes an activity structure that comprises an identity and a

plurality of activity attributes).

As per claims 13 and 22, Uemura further teaches "activity attributes are selected from the group consisting of: start time, end time, time varying parameter and item used in said process" (See Fig. 37A-37C, col. 59, lines 64-67 and col. 30, lines 1-31 wherein Uemura's time series data for industrial activity starts with starting date of taking in and ends with finishing date of taking in along with attributes item, tag, date number, initialDate to identify and delta time being utilized in the time series activity process is equivalent to Applicant's activity attributes are selected from the group consisting of: start time, end time, time varying parameter and item used in said process).

As per claims 14 and 23, Uemura further teaches "at least one of said activity attributes has an attribute value" (See See Fig. 37A-37C, col. 59, lines 64-67 and col. 30, lines 1-31 wherein Uemura's time series process whose attributes starting date of taking in, finishing date of taking in, item, tag, date number, initialDate to identify and delta time all have its attribute value is equivalent to Applicant's at least one of said activity attributes has an attribute value).

As per claims 15 and 24, Uemura further teaches "item is an equipment, and wherein said time series data is linked to said device, which is a part of said equipment" (See Figs. 26-27 and col. 25, line 49 – col. 26, line 65 wherein Uemura's time series process whose measurement instrument/recording device is part of and linked to plant is equivalent to Applicant's item is an equipment, and wherein said time series data is linked to said device, which is a part of said equipment).

As per claims 16 and 25, Uemura further teaches "access request identifies a said time varying parameter with a reference selected from the group consisting of: time based reference with respect to said an interval of said first activity, direct reference to said first activity and indirect reference to said first activity" (See Figs. 26-27, 37A-37C, col. 25, line 49 – col. 26, line 65, col. 59, lines 64-67 and col. 30, lines 1-31 wherein Uemura's time series activity is time varying data with respect to initalDate and delta time, directly refers to item, the measuring instrument, and indirectly refers to the plant is equivalent to Applicant's access request identifies a said time varying parameter with a reference selected from the group consisting of: time based reference with respect to said an interval of said first activity, direct reference to said first activity and indirect reference to said first activity).

As per claims 17 and 26, Uemura further teaches "time based reference is with respect to a parameter that is independent of said process" (See Figs. 26-27, 37A-37C, col. 25, line 49 – col. 26, line 65, col. 59, lines 64-67 and col. 30, lines 1-31 wherein Uemura's time base reference is with respect to parameters plant, device and initalDate which are independent of the industrial process is equivalent to Applicant's time based reference is with respect to a parameter that is independent of said process).

As per claims 18 and 27, Uemura further teaches "direct reference directly refers to said first activity" (See Figs. 26-27, 37A-37C, col. 25, line 49 – col. 26, line 65, col. 59,

lines 64-67 and col. 30, lines 1-31 wherein Uemura's time series activity is time varying

data with respect to initalDate and delta time, directly refers to item, the measuring

instrument, and indirectly refers to the plant of the industrial process is equivalent to

Applicant's direct reference directly refers to said first activity).

As per claims 19 and 28, Uemura further teaches "indirect reference includes a

reference to an equipment used by said process during said first activity" (See Figs. 26-

27, 37A-37C, col. 25, line 49 – col. 26, line 65, col. 59, lines 64-67 and col. 30, lines 1-

31 wherein Uemura's time series activity is time varying data with respect to initalDate

and delta time, directly refers to item, the measuring instrument, and indirectly refers to

the plant of the industrial process is equivalent to Applicant's indirect reference includes

a reference to an equipment used by said process during said first activity).

As per claims 39 and 44, Uemura further teaches "data structure is additionally

defined by a value attribute that is linked to said device, and wherein said request

additionally identifies said value attribute" (See Fig. 29 and col. 27, lines 52-57 wherein

Uemura's tag information on required trend data and date information on the term the

time series data needed is inputted for linking the industrial process data with the

plant/device and time is equivalent to Applicant's data structure is additionally defined

by a value attribute that is linked to said device, and wherein said request additionally

identifies said value attribute ).

As per claims 40 and 45, Uemura further teaches "data structure is additionally defined by an equipment of which said device is a part, and an attribute of said equipment that has a value that is linked to said device, and wherein said request identifies said first activity and said equipment attribute without identifying said device to retrieve said time series data that is produced by said device and that is framed by said first activity" (See Figs. 26-27, 37A-37C, col. 25, line 49 – col. 26, line 65, col. 59, lines 64-67 and col. 30, lines 1-31 wherein Uemura's time series data structure links plant, measuring device and timing of the process to and industrial activity's values time is equivalent to Applicant's data structure is additionally defined by an equipment of which said device is a part, and an attribute of said equipment that has a value that is linked to said device, and wherein said request identifies said first activity and said equipment attribute without identifying said device to retrieve said time series data that is produced by said device and that is framed by said first activity).

As per claim 41, Uemura further teaches "time series data is stored in a database" (See Figs. 1, 26 and col. 26, lines 1-7 wherein Uemura's time series are stored on hard disk and further, the database system method suggests the teaching of the Applicant's time series data is stored in a database).

As per claim 42, Uemura further teaches "data structure is stored in one of said database and a separate memory" (See Figs. 1, 17-18, 26, col. 19, lines 32-42, col. 26, lines 1-7 wherein Uemura's time series data arranging and storing at memory, hard

disk, magnetic tape, optical disk suggests a teaching of storage of data on separate and multiple storage media).


**6.** The prior art made of record

    G. U.S. Patent    6,609,085

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

    A. U.S. Patent    5,974,457

    B. U.S. Patent    6,633,823

    C. U.S. Publication   2003/0014498

    D. U.S. Patent    6,625,567

    E. U.S. Patent    6,590,507

    F. U.S. Publication   2002/0165733

    H. U.S. Publication   2003/0120627

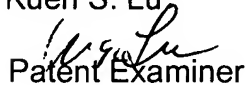    I. U.S. Patent    6,463,465


### *Remarks*

**7.** The Applicants' arguments filed on April 25, 2005 have been fully considered but they are moot on new grounds of rejections.


### <u>Conclusions</u>

**8.** Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Kuen S. Lu whose telephone number is (571) 272-

4114. The examiner can normally be reached on Monday-Friday (8:30 am-5:30 pm).

If attempts to reach the examiner by telephone pre unsuccessful, the examiner's

supervisor, John E Breene can be reached on (571) 272-4107. The fax phone number

for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent

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youhave questions on access to the Private PAIR system, contact he Electronic

Business Center (EBC) at 886-217-9197 (toll-free).

Mohammad Ali

Kuen S. Lu                                      Primary Examiner

Patent Examiner

June 16, 2005                                    June 16, 2005